

## **CLAIM AMENDMENTS:**

### **Claims 1-4 (Cancelled)**

5. (Previously presented) A method for improving discoloration in pulp characterized in that a pulp containing a bleached mechanical pulp is irradiated with UV and/or visible light in the presence of at least one compound selected from the group consisting of reducing agents, peroxides and hydrogen-donating organic compounds.

6. (Previously presented) The method for improving discoloration in pulp of claim 5 characterized in that the pulp containing a bleached mechanical pulp is a mixture with one or more of bleached semi-chemical pulp, bleached chemical pulp and bleached deinked pulp.

7. (Previously presented) The method for improving discoloration in pulp of claim 5 characterized in that the UV and/or visible light is laser light.

8. (Previously presented) The method for improving discoloration in pulp of claim 6 characterized in that the UV and/or visible light is laser light.

9. (Previously presented) The method for improving discoloration in pulp of claim 5 characterized in that the at least one compound selected from the group consisting of reducing agents, peroxides and hydrogen-donating organic compounds is used in the range of 0.05 to 50% by weight on the basis of pulp solids.

10. (Previously presented) The method for improving discoloration in pulp of claim 6 characterized in that the at least one compound selected from the group consisting of reducing agents, peroxides and hydrogen-donating organic compounds is used in the range of 0.05 to 50% by weight on the basis of pulp solids.

11. (Previously presented) The method for improving discoloration in pulp of claim 7 characterized in that the at least one compound selected from the group consisting of reducing agents, peroxides and hydrogen-donating organic compounds is used in the range of 0.05 to 50% by weight on the basis of pulp solids.

12. (Previously presented) A pulp with improved discoloration obtained by the method for improving discoloration in pulp of claim 5.

13. (Previously presented) A pulp with improved discoloration obtained by the method for improving discoloration in pulp of claim 6.

14. (Previously presented) A pulp with improved discoloration obtained by the method for improving discoloration in pulp of claim 7.

Claims 15-17 (Cancelled)

18. (Previously presented) The method of claim 5, wherein said at least one compound is a reducing agent.

19. (Previously presented) The method of claim 18, wherein said reducing agent is sodium borohydride or tetrabutylammonium borohydride.

20. (Previously presented) The method of claim 7, wherein said at least one compound is a reducing agent.

21. (Previously presented) The method of claim 20, wherein said reducing agent is sodium borohydride or tetrabutylammonium borohydride.

22. (Previously presented) The method of claim 5, wherein said at least one compound is a hydrogen donating organic compound.

23. (Currently amended) The method of claim 22, wherein said hydrogen-donating organic compound is ethyl alcohol, ~~benzyl alcohol~~, benzyl alcohol or furfuryl alcohol.

24. (Previously presented) The method of claim 7, wherein said at least one compound is a hydrogen-donating organic compound.

25. (Currently amended) The method of claim 2, wherein said hydrogen-donating organic compound is ethyl alcohol, ~~benzyl alcohol~~, benzyl alcohol or furfuryl alcohol.

26. (New) The method of claim 5, wherein said pulp containing said bleached mechanical pulp is in the form of an aqueous suspension, which aqueous suspension is dewatered and formed into a pulp sheet, which pulp sheet is then impregnated with said at least one compound selected from the group consisting of reducing agents, peroxides and hydrogen-donating organic compounds and irradiated with UV and/or visible light.

27. (New) The method of claim 7, wherein said pulp containing said bleached mechanical pulp is in the form of an aqueous suspension, which aqueous suspension is dewatered and formed into a pulp sheet, which pulp sheet is then impregnated with said at least one compound selected from the group consisting of reducing agents, peroxides and hydrogen-donating organic compounds and irradiated with UV and/or visible laser light.

28. (New) The method of claim 27, wherein said pulp sheet is impregnated with a reducing agent to produce an irradiated pulp sheet having a smaller decrease in brightness than unirradiated bleached mechanical pulp over the first two hours of a fading test using a UV light generated from a Xenon lamp at a black panel temperature of 63°C, humidity of 50% and irradiation intensity of 70W.